



Y-12 BULLETIN

A NEWSPAPER BY AND FOR EMPLOYEES OF CARBIDE AND CARBON CHEMICALS CORPORATION IN Y-12



Vol. 1, No. 32

OAK RIDGE, TENNESSEE

Tuesday, December 9, 1947

PEACETIME BENEFITS SPEEDED BY Y-12 STABLE ISOTOPES

New U. S. Tax Form Concerns Y-12 Employees

The attention of all Y-12 employees has been directed by Plant Bulletin AI, No. 18 to a certain provision of the Federal Income Tax Withholding regulations, which requires that form W-4 must be filled out and filed wherever there has been a change in the exemption status since the filing of the last certificate.

However, the information is now concerned only with the filing of an employee whose exemption has increased in 1947, for the plant bulletin, issued November 28, has already advised that where exemptions decreased in 1947 filing by December 1 was mandatory. It also advised that the new form would not have to be filled out by those employees whose 1947 exemptions remained the same as last year.

Employees with increased exemptions may obtain forms W-4 at the Y-12 Employment Department, building 9701-1 located in the North Portal. The form should then be filled out and be submitted to the Y-12 Employment Office sometime this month.

This particular plant bulletin, AI, No. 18, issued November 28, 1947 reads as follows:

To: All Employees
Subject: Withholding Tax Instructions 1948

Under Federal Income Tax withholding regulations, employees are required to file by December 1, 1947 amended Withholding Exemption Certificates, Form W-4, for 1948 in the event of a change in exemption status since the filing of their latest certificates. This form may be obtained from the Employment Department (Building 9701-1, North Portal), to which the

(Continued on Page 3)



THESE Y-12 SCIENTISTS COLLABORATED IN the production of the more than 100 stable isotopes that will benefit peacetime scientific research by laboratories throughout the United States. Seated left to right are Wesley Savage, L. E. Burkhart, Y-12 Superintendent C. N. Rucker, C. P. Keim, C. E. Larson, R. F. Hibbs, C. B. Graham. Standing are C. E. Normand, J. S. Hood, Boyd Weaver and Russell Baldock. Other pictures of Y-12 personnel identified with the stable isotope development work will be published in an early edition of the Y-12 Bulletin.

Christmas Dance-Party For All Y-12 Employees And Families Seen As Year's Biggest Social Party

Advance ticket sales for the Company Christmas dance-party, arranged for Friday night at the Jefferson Recreation Hall as the "big event" of the year on the Y-12 social calendar, indicates that almost everybody will attend the gala affair with its varied program which will include ensemble singing, dancing to Dexter's Orchestra, and a Truth or Consequences quiz.

The fun-for-everyone program designed to give Y-12 employees and members of their families a big time calls for all to participate in the grand prize drawing event. Although the main prizes are the

big, fat Tom Turkey and the handsome table model radio, three others have been added. These prizes are a combination leather trim golf bag; a combination waffle iron and toaster; and a very nice automatic bread toaster. All prizes except uncle "Tom" will be on display at the cafeteria this week.

Arnold Tiller, Recreation Supervisor will act as master of ceremonies Friday night. The Big Tom has been out at the Tiller ranch being conditioned for some lucky Y-12 family's Christmas dinner. In order to quash one good-natured

(Continued on Page 3)

More Than 100 Stable Isotopes Of 29 Elements Now Available For United States Laboratories

As a result of concentrated work of Y-12 scientists over a period of many months, the Atomic Energy Commission has announced that more than 100 stable isotopes of 29 elements now are available for distribution to laboratories throughout the United States. The announcement of the Y-12 accomplishments was released for publication in Sunday newspapers all over the country and received widespread coverage.

Scientific Problems To Be Solved

Distribution of stable isotopes will speed exploration of the structure of the atomic nuclei and basic understanding of highly important scientific problems. Stable isotopes also will bring new peacetime benefits in the following fields of investigation:

1. As tracers in medical and biological studies where radioactive isotopes cannot be used due to the harmful effects of radiation on living tissues.

2. As tracers in medical, biological and agricultural studies where the radioactive isotope is not suitable due to its short half-life. For example in the studying of the effect of small amounts of copper in the soil on plant processes, the use of the radioactive isotope copper-64 is limited due to its short half-life of 12.8 hours. Copper-63, a stable isotope, can be used in those agricultural studies continuing over a period of years.

3. As the starting material for the production of particular radioactive isotopes which cannot be easily separated when made from the mixture of isotopes as it occurs in nature. An example of this is the production of radioactive iron.

4. Spectroscopic studies of individual isotopes. Such studies reveal much valuable information, previously unavailable, on atomic structure through the observation of optical spectral lines emitted by atoms which have been bombarded by electrons.

Will Provide Much Needed Information

5. In investigations of nuclear moments and nuclear transformation induced by bombardment with various particles. Such data is necessary in the development and advancement of present nuclear theory.

The stable isotopes now available are a result of research and development activities at Y-12, the first Oak Ridge installation to achieve mass production of U-235 early in 1944 for later use in the atomic bomb. The stable isotopes, however, are by-products of research and have no direct connection with atomic bomb development.

The research and development activities at the Carbide and Carbon Chemicals Corp. electromagnetic process plant here in Y-12 which make stable isotopes available are a part of the Research and Development Division of which Dr. C. E. Larson is Director. The Isotope Development Department, Dr. C. P. Keim, Superintendent, includes all phases of stable isotope production and research with the exception of the analysis of the isotopes by the mass spectrometer. These analyses are performed in the Mass Spectrometer Laboratory under the direction of Roger F. Hibbs.

Several Sections Did Work in Y-12

The Isotope Development Department is comprised of several sections which are essential to the investigation of the electromagnetic separation of stable isotopes of a large variety of elements. These sections are:

Isotope Production, John S. Hood in charge; Process and Equipment Development, H. Wesley Savage in charge; Isotope Chemistry, Boyd S. Weaver in charge; Isotopes Physics, L. Elkin Burkhart in charge; and Materials Laboratory, Cliff B. Graham in charge. Dr. C. E. Baldock and Dr. C. E. Normand serve the entire department as staff physicists.

All of the work has been done under the direction of Y-12 Superintendent C. N. Rucker.

Alteration In Process Brought Stable Isotopes

Alteration in the electromagnetic process plant equipment (Continued on Page 3)



DANCE MUSIC at the Y-12 Christmas party being arranged for the Jefferson Recreation Hall, Friday night, December 12, will be furnished by Bill Dexter and his orchestra, pictured above. The Dexter Orchestra of Knoxville, one the best known bands in East Tennessee, has just completed 20 engagements at the Holston Hills Country Club. Members of the orchestra, left to right, are Paul Snavelly, Bob Wilson, John Donnell, Roy Cox and Bill Dexter. Clarence Underwood, another member of the band, was not present when the photograph was taken. Donnell plays the saxophone and clarinet; Wilson, the trumpet; Snavelly handles the trombone; Cox doubles on the bass and second-trombone; Underwood drums the drums; and Dexter, who leads the orchestra, takes care of the piano assignment.

Y-12 Bulletin

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GEORGE W. DOBBS . News Editor
MARC V. SIMS . Asst. News Editor
ARNOLD TILLER . . . Sports

OFFICE

North Portal, Bldg. 9701-1
Telephone 7402 or 7-8252

New Carbide Product Shrinkproofs Rayon

The story of rayon reads almost like a Horatio Alger novel—"Rags to Riches or, Persistence Overwhelms a Thousand Obstacles." In the 30 years since rayon was first manufactured in the United States this "man-made" fiber has inched its way ahead in spite of many obstacles.

Rayon Replaces Silk

Today, almost two-thirds of all women's dresses are made entirely or partially of rayon. It is widely used for sport clothes, for suit linings, for stockings, for tire cord, and many other special applications. Rayon has taken the place of silk almost entirely, and competes very strongly with cotton.

Chemists—those persistent seekers of perfection—keep trying to improve this man-made miracle. Like the Alger heroes, their persistence has been rewarded.

For many years one of the chief obstacles to the use of rayon for clothing has been the difficulty of washing it successfully. Rayon clothing could not be washed with any assurance of keeping its shape or size. Like some small boys, rayon just "acted up" every time soap and water was used. As a result, most women regarded clothing made of rayon with deep suspicion. This is where our persistent heroes—the chemists—enter the scene.

Rayon Made Shrink-Proof

Now, through the use of a new chemical known as glyoxal, recently made available by the Carbide and Carbon Chemicals Corp. shrink-proofing has finally been achieved. A rayon dress, sport shirt, or any rayon fabric which has had this special chemical treatment can be washed as successfully and easily as a handkerchief. This method of making rayon shrinkproof is known as the "Sanforset" process. With this development the use of rayon for all kinds of clothing will undoubtedly increase.

College Women's Club Sets Christmas Dance December 13

Several Y-12 women employees will take prominent parts in handling details for the fourth annual Christmas dance to be staged by the Oak Ridge College Women's Club Saturday night, December 13, in the Fountain Room of the Ridge Recreation Hall. The Y-12 girls who will be among those attending include Reba Justice, vice president of the club; Nancy Doane, Mary Barnes and Martha McComb.

The social committee is headed by Peggy Oldham, and includes Esther Preslar and Ruth King, both former Y-12 employees; and reservations may be obtained by telephoning Miss Oldham at 5-7183 after 5 p.m.

Music will be provided by Bill Dexter's orchestra from Knoxville, the same fine band that will play for the Y-12 party dance the previous night.

WHO AM I?

I am a little thing with a big meaning. I help everybody. I unlock doors, open hearts, dispel prejudice. I create friendship and good will. I inspire respect and admiration. Everybody loves me. I bore nobody; I violate no law. I cost nothing. Many have praised me, none has condemned me. I am pleasing to those of high and low degree. I am useful every moment of the day. I am COURTESY.



CLEVENGER — DAVIS
Mr. and Mrs. Paul Winston Clevenger are shown leaving the Chapel-On-The-Hill after their marriage October 26. The bride, the former Kathryn Joyce Davis, is employed by the Atomic Energy Commission. The groom is employed in Department A12G, Badge and Pass Office.



Mr. and Mrs. Robert Morris

PARKS — MORRIS

The marriage of Miss Pauline Parks, of Dept. A12N, to Robert Morris, of Dept. A12W, took place November 22 in the Main Street Baptist Church at Lake City, Tenn., with Rev. O. D. Denny officiating.

The bride was given in marriage by her father, Floyd Parks. She wore a white satin gown, fashioned with a sweetheart neckline and fingertip veil of illusion. She carried a bouquet of chrysanthemums and roses, centered with gardenias.

Mrs. Carl Sharp, sister of the bride, was matron of honor. She wore a blue taffeta gown with matching mitts. Her bouquet was of chrysanthemums.

Bob Blair, of Oak Ridge, was the best man.

Mr. and Mrs. Morris are making their home in Oak Ridge.

Hospital List

Three Y-12 employees were patients at the Oak Ridge Hospital last week. They were Frank Fuiss, Dept. A12W; Ethel White, Dept. M12P; and Clyde Baker, Dept. A12M.

Three Groups Tied In Attendance Mark

Although the plant attendance for the week ending November 30 showed a group absentee percentage of 1.4 higher than the preceding week, three minor league departments came through with perfect records. These were Dept. A12T, Garage Repair Shop, Dept. A12D, Dispensary, and Dept. B12A, superintendents.

Repairmen Repeat Mark

The Garage Repair Shop repeated for the third successive week in posting its perfect attendance record; while the perfect mark for the Dispensary jumped that department from third place the previous week to its top sharing position.

The major league group absentee record for the week ending November 30 posted no perfect attendances but Dept. H12E, Process Development, came close with a 0.4 percentage. In second place was Dept. B12H, Refining, with an absentee percentage mark of 1.3.

Record By Departments

The plant absentee record by departments for the week ending November 30 follows:

MAJOR LEAGUE More than 50 Employees				
Dept.	Absent Percentage	11-30-47	11-23-47	Standing
H12E	0.4	1	3	2
B12H	1.3	2	2	3
M12P	1.45	3	1	1
B12L	1.51	4	1	1
H12L	2.0	5	6	6
A14N	2.1	6	9	9
A13N	2.3	7	15	15
A16N	2.6	8	8	8
A12W	3.0	9	12	12
A12G	3.6	10	4	4
A12M	3.9	11	10	10
B12C	4.87	12	7	7
A14J	4.88	13	5	5
A12S	5.8	14	16	16
H12D	5.9	15	13	13
A17N	6.1	16	11	11
B12L	6.5	17	14	14

Group absentee percentage was 3.3 per cent, 0.1 per cent higher than the preceding week.

MINOR LEAGUE 15-49 Employees				
Dept.	Absent Percentage	11-30-47	11-23-47	Standing
A12T	0.0	1	1	1
B12A	0.0	1	1	1
A12D	0.0	1	2	2
A12L	1.47	2	6	6
A13S	1.53	3	3	3
A13T	3.3	4	7	7
A15N	3.95	5	1	1
A12R	3.96	6	5	5
M12S	4.5	7	10	10
A12N	5.8	8	4	4
B13C	8.3	9	9	9
A12A	8.6	10	8	8
A19N	8.8	11	11	11

Group absentee percentage was 4.2 per cent, 1.4 per cent higher than the preceding week.

The plant average for the week ending November 30, 1947, was 3.5 per cent, 0.4 per cent higher than the preceding week.

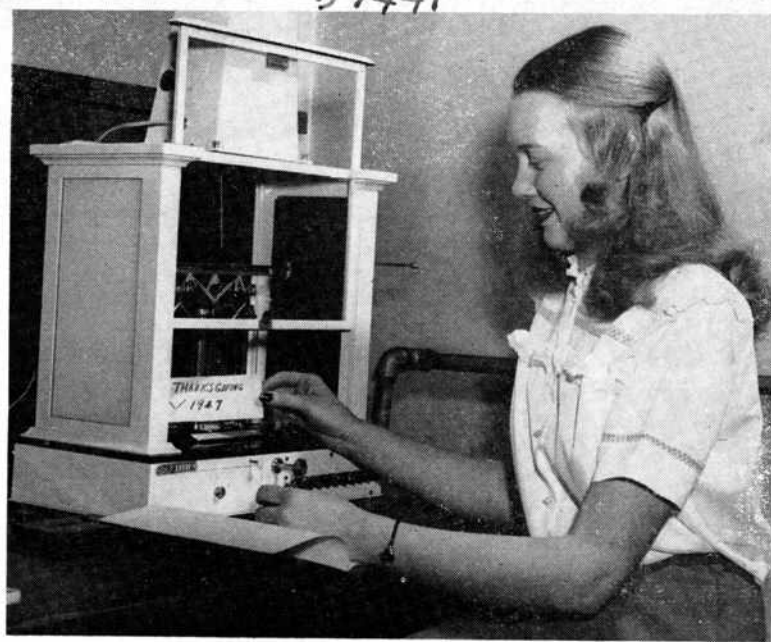
American Legion Membership Drive Is Launched In Y-12

The American Legion membership drive in Y-12, headed by Hugh Rice, a group leader in the Time Keeping Department, has now been completely organized as Rice has announced the selection of area captains. They are Woody Palmer, phone number 7047, who will contact veterans in the Administration area; Charles E. Gillihan, phone number 7-8448, will captain the drive at Bldg. 9212; Ira Shotts, phone number 7671, has charge of the D Area campaign; and Arthur Rogers, phone 7272, will cover the Guard Headquarters.

Frank Wilson, commander of the Atomic City Post, No. 199, American Legion, announced at last Thursday night's meeting the membership goal of 1,000 is now within shooting range and efforts would be redoubled to go over the top by December 31. Legion members heard City Manager L. Z. Dolan speak on the subject "The Veterans Place in Oak Ridge." Dolan, a veteran of World War I, expressed a hope that the city administration could look to the American Legion for leadership in the cultural and civic progress of Oak Ridge.

JAYCEES TO SELL TREES

Al Bissell, of Y-12, has been named chairman of an Oak Ridge Junior Chamber of Commerce committee in charge of selling Christmas trees. The sale is expected to start soon in a space at the Oak Ridge Town Market.



57441
THAT THE CHEMICAL DEVELOPMENT Dept. believes in literally carrying out the old philosophical adage of "weighing ones' words" is aptly illustrated in the above picture which shows flaxen-haired Nancy Doane posed in front of the sensitive and intricate micro balancer. The blank paper weighed 1.1008 grams; with the inscription "Thanksgiving 1947" it weighed 1.146 grams. Believe it or not, the word and the numerals weighed 0.0038 grams, or 3.8 milligrams.



H. J. Belknap, Dept. H12L, recently spent a two-week vacation visiting points in Mississippi.

H. D. Whitehead, Dept. B12L, returned Monday from a vacation . . . Gwendolyn Thomas has returned to work after an extended illness . . . Dora Woods and Thelma Cole attended the wedding of Evelyn Carpenter and Ralph Brobeck in Clinton November 23. The bride is a former employee of Y-12.

E. C. Sienknecht, Dept. A12W, has returned from a recent vacation spent at his home in Inskip. . . R. G. Boxley is spending a two-week vacation hunting near his home in Winchester, Ky. . . T. M. Address is spending a quiet vacation in Oak Ridge this week . . . Dept. A12W is happy to welcome Lillian Howard back to work after an extended illness.

Everything is running smoothly along the North Portal now. Howard P. Doyle, boss man of Industrial Services; and George W. Dobbs, news editor of The Y-12 Bulletin both are back on the job after short rests. Mr. and Mrs. Doyle went to Greenville, S. C., for a week while Dobbs smogged it out in Nashville for a few days.

Dept. A14N, hopes W. F. Ford, who is ill, will recover soon . . . R. H. Freeman returned Monday from a one-week vacation.

Sympathy is extended to Connie G. Wilson, Dept. B12C, whose brother was killed in an automobile accident near Dandridge, Tenn., November 29.

Ed Mann, Dept. H12E, returned from a recent vacation spent in Iowa.

Howard Harman, Dept. B12H, is spending a two-week vacation in Oak Ridge.

James Keeton, Dept. H12L, during a two-week vacation went to Meridian, Miss., and got the new Chevrolet he has been waiting for so patiently . . . Bill Chapman, Dept. H12L, spent a recent weekend in Raleigh, N. C. . . Group No. 4, Dept. H12L, enjoyed a party given at the home of Fred Boody recently.

Ann Prestin, Dept. A12N, made



Y-12 employees who became parents with the arrival of newcomers at the Oak Ridge Hospital recently include Mr. and Mrs. H. D. Craft, boy, November 28; Mr. and Mrs. Joseph E. Lee, girl, November 30; Mr. and Mrs. B. C. Barrell, girl, November 30; and Mr. and Mrs. M. J. Fortenberry, girl, December 1.

a trip to Cincinnati, Ohio, recently to meet her father from Cleveland, Ohio, who is to reside with her. C. R. Kasperek is back after a two-week vacation spent in St. Louis, Mo., during which he purchased a new Ford. . . Elmer Green, and E. A. Cobble, of Dept. A17N and A. H. Norman, Dept. A13N, enjoyed the Vols and Vandy football game at Knoxville.

V. F. W. Plans 'Civil War' For Its Membership Drive

A whirlwind membership campaign by the Raymond C. Mason Post, No. 6351, Veterans of Foreign Wars, based on the idea of divide and conquer has been announced by Post Commander Kenneth C. Fahey.

The post membership has been divided into sides which have designated the E. T. O.s., and the Asiatic-South Pacific teams, with men who served in the European Theater aligned against those who served in the other theaters of the late war. Jim Babbs, a city playground recreation director, has been named to head the first group, while Ted Williams of the AEC Patrol has been selected to lead the second team.

The goal is to bring the total membership of the post to 750, which would be 250 more than the state-allotted quota, it is stated by W. O. Elam, Post Senior Vice Commander and a captain in the Y-12 Fire Department. The membership drive scheduled to run for a month will end with a big feed in which the losers will play host to the winning side.

Commander Fahey also announced last Tuesday night that a new building would have to be obtained for its headquarters as one of the new dwelling projects planned for Oak Ridge will encompass the present location of the post. The membership voted authority for the commander to negotiate with AEC for new quarters.

MELON EATER PUNISHED

Judge Joshua Haskell, who presided over the Eighth District Court at McMinnville, was impeached in 1829 for going out behind the courthouse and eating a watermelon.

HISTORIC PLAGUES

One of the worst plagues which swept Tennessee was a siege of yellow fever, which claimed many lives in Memphis in 1878. There were more than 5,000 fatalities, 25,000 fled in fear and an additional 5,000 were sheltered in concentration camps.

Peacetime Benefits Of World Benefited By Stable Isotopes Developed In Y-12

(Continued from Page 1)

ment in Y-12 makes it possible to separate isotopes of elements other than uranium. Consequently, there now are available for research uses more than 100 stable isotopes of 29 elements. The new processes provide much larger quantities of stable isotopes than formerly were available. Heretofore in various laboratories stable isotopes have been concentrated in amounts too small to be seen with the naked eye. With the new equipment it is possible to concentrate amounts which can be weighed and handled like ordinary rare chemicals.

The elements from which the stable isotopes now are available are lithium, boron, carbon, magnesium, silicon, chlorine, potassium, calcium, titanium, chromium, iron, nickel, copper, zinc, germanium, selenium, bromine, zirconium, strontium, molybdenum, silver, cadmium, indium, tin, antimony, tellurium, tungsten, thallium and lead.

Other Elements Not Concentrated Here

Stable isotopes of two groups of elements which are not being concentrated electromagnetically for distribution are:

(1) Elements which are normally gaseous and (2) elements which are heavier than lead. The isotopes Hydrogen-2 (deuterium), Boron-10, Carbon-13, Nitrogen-15 and Oxygen-18 are more readily concentrated by means other than the electromagnetic process. Hydrogen-2, Boron-10 and Oxygen-18 are now obtainable from the Isotopes Division, Atomic Energy Commission, Oak Ridge; Carbon-13 from the Houdry Process Corporation, Marcus Hook, Pa., and Eastman Kodak Company, Rochester, N.Y.; and Nitrogen-15 from Eastman Kodak Company, Rochester.

Under the new distribution program the stable isotopes will be furnished the laboratories only on a loan basis since the supply is limited and the production cost rather high.

Pool of Stable Isotopes Planned

A "pool" of stable isotopes will be established and maintained from which an individual may withdraw amounts for his research. The Oak Ridge laboratories cannot produce stable isotopes to order. Furthermore, considerable time may elapse in some cases before further quantities of the isotopes will be concentrated beyond that already on hand. For this reason research investigations which do not use up or adulterate the material will be given the highest priority of allocation. A statement will be required to account for all material not returned, or returned in adulterated form.

To obtain a stable isotope loan, a laboratory must send in a request to the Isotopes Division, Atomic Energy Commission, Oak Ridge, for an allocation. Upon approval for an allocation of the desired isotope the requestor must forward his purchase order of \$50 per each enriched sample to the Carbide and Carbon Chemicals Corp., Isotopes Office, Oak Ridge. Material will be shipped prepaid by the supplier. When an individual has completed his research or within the date specified in the allocation, the unadulterated isotopic material, whether in the original compound form or in another, must be returned to Carbide and Carbon Chemicals Corporation, Isotopes Office, with return shipping prepaid by the requestor.

Radioactive Isotopes Also Valuable

The distribution of the stable isotopes will be in addition to the distribution of radioactive isotopes which was started in August, 1946. Shipments of radioisotopes to various research laboratories in this country and abroad total approximately 1,500 as of December 1. Radioactive isotopes are now being used as important tools for discoveries in medicine, biology, physics, chemistry, etymology, industry, engineering and agriculture.

Background Material on Stable Isotopes

Most chemical elements are made up of several different kinds of atoms, each having a different weight, although they have the same chemical properties. The different kinds of atoms are called isotopes. For example, about 90 per cent of all atoms of iron are a single isotope. In the remaining ten per cent are three other isotopes. If the atoms in a speck of ordinary iron were weighed and sorted, four piles of atoms would be the result.

Isotopes which, like radium, emit radiations are called radioisotopes. Those which do not emit radiations are called stable. Radioactive isotopes occur in nature. For example, in uranium and thorium; stable isotopes occur in practically all the elements. Man now can make radioisotopes by placing certain stable isotopes in a chain-reacting pile where, through bombardment, they absorb neutrons and are transmuted into radioisotopes. Radioactive isotopes, both naturally-occurring and man-made, ultimately decay into stable isotopes, the period of decay being expressed as the half-lives of the particular isotopes. For example, the half-life of radiocarbon (C-14) is 5,100 years, the half-life of radiosulfur (S-35) is three months, and the half-life of radiophosphorus (P-32) is 14.3 days.



THIS PICTURE TAKEN of a scene at last year's Y-12 Christmas party vividly depicts the gaiety of the occasion of these memorable affairs which again will be repeated this Friday night at the Jefferson Recreation Center. In the scene pictured above everyone has joined in the carol singing and is having one glorious time as judged by the facial expressions. The Y-12 people identified are T. A. McKenzie, Superintendent of Plant Protection, shown at the mike with his hand upraised; the man seated in second place to his right is Wynn O. Watson, Asst. Chief of the Y-12 Guard Department; next to the last place on the right, standing, is Arnold Tiller, Recreation Supervisor.

Route No. 30 Express Bus Service Curtailed

Another change in the schedule of the American Industrial Transit buses serving Y-12 will be made December 15.

The Route 30 express buses, now travelling via Louisiana Ave. and West Outer Drive and serving Y-12 employees living in the West Village area of Oak Ridge, will be discontinued next Monday for the 7 a.m., 3 p.m. and 11 p.m. shifts. Express buses serving the 8 a.m. to 4:30 p.m. shift on this route will remain on the present schedule.

The announcement made in The Y-12 Bulletin that express buses originating at the Arkansas Cafe would be eliminated, stated that the Louisiana express buses would continue operating if the service requirements warranted. However, the discontinuance of this service is based on a close check of passengers carried in recent weeks.

Passengers formerly using the express buses on route 30 will be furnished adequate service through regular buses leaving the Jefferson Terminal.

Jones telephoned the theater and asked:

"Can I get a box for two tonight?"

"Not here, buddy, we don't have boxes for two, this is the undertaker."

Proud Pop called the newspaper to announce the birth of twins. The society reporter didn't quite understand the excited message and asked:

"Will you repeat that?"

"Not if I can help it," said Pop.

A day on the job beats a month in the hospital.

Y-12 PAINT SHOP ARTISTS MAKE SIGNS

The 29 beautifully created posters which so vividly remind Y-12 folks of the Company dance-party Friday night at the Jefferson Recreation Hall, is the work of E. L. Hill and fellow artists of the Y-12 Paint Shop. The signs, placed conspicuously over the Y-12 area, fairly glitter with the words "Party Dance" done in sparkling red. The rest of the words and background neatly carry out the Christmas design and aptly convey the message that the Friday night party will be a brilliant affair.

Christmas Party All Arranged For Friday Night

(Continued from Page 1)

rumor, The Bulletin has ascertained, that although the turkey was out at the Tiller ranch Thanksgiving the Tillers had chicken for dinner that day. Each person is requested to be sure and save his ticket stub as the prize drawings will be based on the ticket numbers.

The program calls for all to join in the carol singing of such good old numbers as "Silent Night", "Joy To The World" and many others. Among the interesting fun-contests lined up is the "lead the singing" competition.

Bill Dexter has promised that the Y-12 dancers and lovers of dance music will get their fill Friday night. The noted Knoxville orchestra has worked out special song arrangements for the orchestra that include besides the band's theme song "Say It With Music", "How High The Moon", "White Christmas", "Near You", "Diane", "Sleepy Time Gal", "What Are You Doing New Year's Eve", "Chloe", "Star Dust", "Maybe You'll Be There", "As Long As I'm Dreaming" and many others. The sign-off song will be the old favorite "Good Night Sweetheart."

The Recreation Department has placed plenty of tickets at strategic locations over the Y-12 area so as to be easy available to all employees. Tickets at Building 9704-2 can be obtained from Jim Kirk; from W. D. Lavers in 9739; Bill Herron at 9706-1; Clyde Bowles at 9739; R. S. Phillippi at 9212; J. W. Garland at 9720-2; Phil Rueff at 9766; Jim Whitcomb at Building 9766; Pat Ridge, Suggestion Office, North Portal and at the Y-12 Recreation Office, North Portal.

BOSTON BEANS CASSEROLE

Place one (18 ounce) can of baked beans in casserole. Add two teaspoons of brown sugar, one teaspoon of dry mustard and two-thirds tablespoon of tomato ketchup and mix well. Top with cubes of salt pork or thin slices of bacon and brush with butter or margarine. Baked uncovered in a moderately hot oven (375 degrees Fahrenheit) for 45 minutes. Serves

Be sure all documents, prints and other material are classified according to security regulations.

Camera Club Election Slated For Tonight

The Carbide Camera Club, composed of approximately 35 photographic hobbyists from both the Y-12 and K-25 plants of Carbide and Carbon Chemicals Corp., will hold its annual election of officers tonight at 7:30 o'clock in the club headquarters, located in the Y-12 East Portal Building. Present officers are Gilbert Mellen, president, Kenneth Bernander, vice-president, and Paul Vanstrum, secretary and treasurer. Mellen and Bernander are Y-12 employees, and Vanstrum works at K-25.

Following the business session, color slides of subjects entered in the club's current competition, will be shown on a new screen recently purchased. Most of the slides are expected to be subjects showing autumn scenes taken in the Oak Ridge locale and of the Smoky Mountains environment.

The Ansco Company program originally scheduled for tonight has been advanced to Tuesday, December 23, date of the club's next meeting.

New Tax Exempt Form Concerns Y-12 Employees

(Continued from Page 1)
completed form should be submitted.

The rules which govern the filing of new Withholding Exemption Certificates, Form W-4, are these:

If the number of an employee's exemptions has decreased in 1947 the new Form W-4 must be filed with his employer by December 1. If change occurs in December, the new form is due within 10 days after the change. If the number of an employee's exemptions has increased in 1947, the employee may file a new W-4 with the employer on December 1. If the change occurs in December, he may file the form at any time thereafter. If there has been no change in the employee's exemption status, he does not have to file a new form.

The old one is still usable. In all cases where the employee files a new form W-4 in December, it is to be used to figure the proper withholding form 1948 wages and has no effect on withholding from wages paid in December.

**CARBIDE AND CARBON
CHEMICALS CORPORATION**
P. O. Box P.
Y-12 Area
Oak Ridge, Tenn.
(RETURN POSTAGE GUARANTEED)

Sec. 562, P.L.&R.
U. S. Postage
PAID
Oak Ridge, Tenn.
Permit No. 3

SPORT NEWS IN Y-12

Guards Grab Plant Loop Basketball Opener With 24 To 20 Win Over Time Keepers; Kimbro's Shooting Keeps Losers In Running

The Y-12 Guards captured the opening game of the 1947-1948 basketball season in the Plant League by skinning past a fighting Time Keeping aggregation on a score of 24 to 20. Kimbro, who starred last year on the Taylor Green Devils, kept the Time Keepers in the running most of the way by chalking up 16 counters. His sensational basket shooting gave him high point honors for the night by a wide and handsome margin. Blankenship paced the Guards in hitting the netted loop for nine points. Bill Davis, of the Y-12 Security Office and coach of the women's basketball team in the City League, referred the tussle.

The Y-12 Plant Basketball League schedule of games for the first two rounds which has been announced by the Recreation Department calls for Monday, Wednesday and Friday night jousting beginning this week. Monday night games are scheduled for the Fairview School gymnasium; and Wednesday and Friday night contests set for the Scarboro School gymnasium.

The new and revised schedule eliminates the Thursday night games and gives a better spread and spacing over the week for play in the plant cage loop. The season's entire schedule will be divided into a first half and second half, followed by a playoff series between the winners of the first and second halves.

Schedule for the first two rounds follows:

Thursday, December 4— Rough House Five vs Bldg. 9212, 7 p.m. Guards vs Time Keepers, 8:30 p.m.

Friday, December 5— Time Keeper vs Bldg. 9212, 7 p.m.; Kilroys vs Guards, 8:30 p.m.

Monday, December 8— Guards vs Rough House Five, 7 p.m.; Kilroys vs Bldg. 9212, 8:30 p.m.

Wednesday, December 10— Time Keepers vs Rough House Five, 7 p.m.

Friday, December 12— Bldg. 9212 vs Guards, 7 p.m.; Time Keepers vs Kilroys, 8:30 p.m.

Monday, December 15— Bldg. 9212 vs Time Keepers, 7 p.m.

Wednesday, December 17— Kilroys vs Time Keepers, 7 p.m.; Guards vs Rough House Five, 8:30 p.m.

Friday, December 19— Rough House Five vs Bldg. 9212, 7 p.m. Guards vs Kilroys, 8:30.

Monday, December 22, Bldg. 9212 vs Rough House Five, 7 p.m.

Cueists Of Y-12 Dodge Eight-Ball

After getting off to a bad start in the CEW Pocket Billiard Loop, the Y-12 cue artists began their cellar-exodus drive by taking six out of the last ten games. Last week the team nosed out the Jefferson aggregation by taking three games out of five. This latest triumph enabled the Y-12ers to move up the basement stairs and occupy the first floor over the Jeff outfit.

Y-12 posted its win over Jefferson on the following scoring, the first named being the Y-12 shooters: Wiest lost to Wiley, 47-75; Galloway won over Morrisett, 75-66; Minge lost to Woods, 66-75; Walker won over Wattles, 75-37; and Burnett won from Webb, 75-30.

League standing follows:

Team	W	L
K-25	27	9R-A
AEC	25	11Skidmores
Y-12	21	15Fairchild

Mrs. Whittington ambled into the butcher shop and stared at the clerk. "Give me two dozen chops and make them lean," she demanded.

"Yes ma'am," he replied. "Which way, right or left?"

Great forests once covered most of Tennessee, but today less than one-tenth of the primeval stand remains. Patches of virgin timber, mostly hardwoods, are today scattered over the state.

Y-12 Varsity Keglers Bow; Hope To Elevate

The Y-12 varsity bowlers followed the December 2 record rolling in reverse by dropping a two out of three game clash to the Atomic Energy Commission kegglers last Tuesday night at the Central Alleys.

Y-12 started out in the first game with a determination to advance in the City Industrial Bowling League standings when they captured the first canto, 894 to 814. But Y-12 went into a tailspin and lost the next two to the AEC pinmen by tallies of 836 to 874 and 787 to 815. However, Y-12 expects to get into the groove tonight when they meet the Skidmore outfit at the Central Alleys.

The following scores were posted by the Y-12 pinmen: Cobble 594; Beckett 548; Barker 424; Zabenko 424; Roberts 527. Although the Y-12ers have a fair-to-middling record as far as their present league standing is concerned, two of their team members, Roy Roberts and Ernie Cobble stand No. 1 and No. 2 in the loop. Roberts has a 177 game average while Cobble is close with a 175.

League standing follows:

Team	W	L
Cue-Cushion	29	10AIT
Carbons	24	15Y-12
Monsanto	23	17Jeffs

Employee's Sons Plan College Football Play

Football playing sons of Y-12 employees graduating from the Oak Ridge High School this spring, will hit the Wildcats 1948 prospects a real blow, according to Coach Ben Martin who already is seeking replacements for seniors Tommy Hamrick, Buddy Duncan, Arthur Stewart and Billy Koons.

Tom Hamrick, son of Paschal Hamrick, Dept. A12L, an "A" student at the high school and president of the Honor Society, plans to attend Vanderbilt University and continue to play football. Buddy Duncan, son of E. E. Duncan, Dept. B12C, will go to college but has not yet decided where or what course he will take. Arthur Stewart, son of A. L. Stewart, Dept. A17N, is undecided what he will do following graduation. But Billy Koons, son of E. W. Koons, Dept. A17N, is sure about his desire to continue playing football at some college and is ambitious to become a sanitary engineer.

However, Y-12 will be well represented in the lineup for the 1948 Wildcats' squad with Tom and Charles Normand, Tommy Halloarn, Robert Underwood and Briggs Richardson again reporting besides a number of Jefferson Junior High School graduates.

"Your husband seems to be very brilliant. I suppose he knows everything?"

"You'd be surprised. There are a lot of things he doesn't even suspect."

Lizards, turtles, frogs and 30 kinds of snakes are common in Tennessee. Only the rattlesnake, the copperhead and the cotton-mouth moccasin are venomous.

Desk drawers, even when locked, are not proper repositories for restricted data. Only a locked safe is a safe spot for such material.

We "know how." They don't. Keep it that way.

Plant League Pinmen Launch Second Round

The Plant Bowling League got off to a surprising second round start last Thursday night at the Grove Alleys when two top bracket newcomers showed up in a triple tie in the standings. The Wolves took four points from the Bottom Busters and Bldg. 9212 likewise made a clean sweep in banishing the Knot Holers.

As the Bums also grabbed four points from the Big'uns, they share the second round league leadership with the Wolves and Bldg. 9212. The Wolves marked up the night's high scratch series with a 2,966. Adams of the Comets chalked up high scratch series with 546.

Termites Crawl Toward Top Of D League

The ceiling crawling Termites enjoyed a four-point post-thangsgiving feed at the Scotties' expense last Tuesday night at the Jefferson Alleys and took over sole possession of the top spot in the D Area League after a two-notch climb. However the biggest jumpers were the Strikers who vaulted from the fifth rung into a close second place position as a result of a four-point victory over the Old Men. The Termites now top the heap with a 28 won and 20 lost record, while in close pursuit are the Strikers with 27 and 21.

The biggest upset of the night's maple mauling occurred when the cellar-dwelling Wood Choppers chopped out a surprising three-point win over the skidding Calutrons who consistently topped the loop week after week until a recent let-down. The Splinters in a three-point win, scaled the Overheads down from their last week's top tie to a third place deadlock with the Calutrons.

Burns of the Strikers scorched the alleys with fine game scores 190,221 and 196 for a 607 scratch total which was plenty good enough to top all bowlers for the night and also set a new record for the season. He also rolled high handicap scores of 220, 251 and 226 for a 697 aggregate. Caldwell of the Splinters rolled games of 176, 163 and 205.

The Termites' present D Area League leadership is based on 28 won and 20 lost. The Strikers occupy the second spot with 27 and 21. Tied for third and fourth positions are the Overheads and the Calutrons, each with a 26 and 22 record.

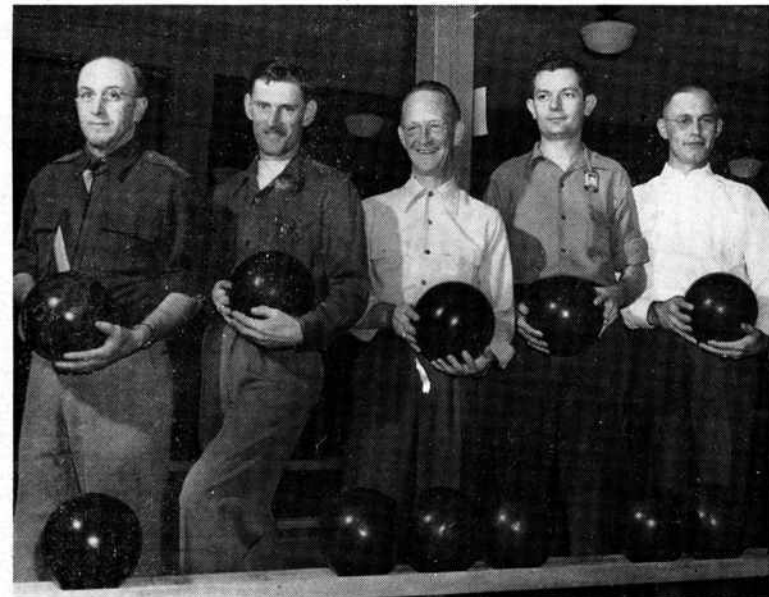
Plant Lassies Nearing Lead In Pin League

The Y-12 girls maintained the second spot position in the Women's City Bowling League after taking two games from the Morats last Thursday night at the Grove Alleys. The Y-12ers are within easy striking distance of the loop-leading Monsanto team as the Y-12 record of 22 won and 11 lost is but a single game in arrears.

Lora Tucker ably aided and abetted the Y-12 win over the Morats by chalking up 467 for the night's series high.

MARBLE IS VARIED

Tennessee quarries 20 varieties of marble. The monotone is best known because of its massive structure, soft color and complete crystallization, which permits a high polish.



THE CEILING BUSTING BOTTOM BUSTERS rolled the Bums aside in the triple-playoff joust for first round kingpin honors in the Plant Bowling League. The Bottom Busters vanquished the Knights of the Road in a "knock-down, drag-out" affair, winning two games by scores of 976 to 945 and 1,003 to 914 and dropping one on a tally of 1,053 to 938. Left to right are Ernie Cobble, Bob Martin, Harold Ratjen, Ed Whitaker and Bruce Whitaker — the Whitakers ade not related. Not present when the picture was taken were C. E. McGregor and H. E. Buckminster. Bottom Busters' first round averages were Cobble 170, Martin 150, McGregor 153, Ratjen 142, B. Whitaker 156, Buckminster 160 and E. Whitaker 158. A definite date for the Bottom Busters' playoff with the Rippers has not yet been set. The Rippers, Bums and Bottom Busters finished first rolling in the Plant League all tied up on the top rung with records of 22 won and 11 lost.

Y-12 Women's Basketball Team Meets Monsanto In Opening Tilt

The Y-12 feminine basketballers, defending champs, drew the Monsanto lassies as opponents in the Women's League opener scheduled for 7:15 p.m., December 15, at the Jefferson Junior High School new gymnasium. No admission will be charged for this game and it is expected to be a preliminary to a first contest in the men's CEW Cage League.

Six Teams In League

The six teams in the Women's CEW Basketball League are Y-12, Monsanto, Hilltop Marketeers, Roane-Anderson, AEC and K-25. The first week's schedule calls for

the Monday night game between Y-12 and Monsanto. Roane-Anderson plays K-25 Wednesday, December 17; Hilltop Marketeers meets AEC Thursday night, December 17 and Y-12 plays Hilltop Marketeers Monday night, December 22. Women's basketball games are all scheduled for 7:15 p.m. at the new Jefferson gymnasium.

Y-12 Squad Members Listed

Y-12 women who have reported to Coach Bill Davis besides the veterans Dot Mellen, Virginia Bowers, Judy and Alta Lowe, are Ruth Buttles, Hazel Johnson and Frankie Rich. Other members of the Y-12 cage squad are Margaret Baker, Helen Brown, Marie Burgess, Joan Gilliam, Jean Lynch, Carolea McKnight, Gerry Morrisett, Frasia McKnight, Bonnie and Pat Roberts and Jean Thomas. Helen Brown also played last year on the champion Y-12 team.

Y-12 Badminton Players Paged

Arnold Tiller, Y-12 Recreation Supervisor, has sounded first call for badminton players as play in the city league will start in the near future. As jousting in the CEW badminton loop is based on singles and doubles matches in both the men and women's divisions besides mixed doubles, men and women are needed to represent Y-12.

The English teacher wrote on the blackboard, "I didn't have no fun over the week end." "Now, Jimmy," she said, "How should I correct that?"

Jimmy: "Go get yourself a feller."

* Stop and let the trains go by. It hardly takes a minute and you and your car still are in one piece.

Y-12 Will Enter Quintet In Oak Ridge City League

Y-12 will enter a team in the newly formed Oak Ridge Men's City Recreation Basketball League, it has been announced by Arnold Tiller, Recreation Supervisor. Other teams entered in the league are the Jaycees, Fairchild, AEC Independents, AEC Luckies, Grove Merchants and the Southern Bell Telephone Company. The Y-12 squad will be composed of 12 players, Tiller said. The schedule for league play has not yet been announced.

Plant Men Attend Opening Of Club

Y-12 members of the Oak Ridge Sportsmen's Association were prominent at the first meeting of the organization in its new clubhouse on the Oak Ridge Turnpike last Tuesday night. Because considerable work is pending before the finishing touches are put on the building, formal opening will be held some time in January.